

Notice of Allowability

Application No.

10/680,919

Examiner

Paul A. Zucker

Applicant(s)

YOSHIDA ET AL.

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20060609.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.


PAULA A. ZUCKER, PH.D.
PRIMARY EXAMINER

DETAILED ACTION***Allowable Subject Matter***

1. The following is an examiner's statement of reasons for allowance: The instantly claimed method for producing an α -hydroxy carboxylic acid ester is neither disclosed nor fairly suggested by the closest art of record: Biella et al (Catalysis Today, Application of Gold Catalysts to Selective Liquid Phase Oxidation, 2002, 72, pages 43-49). Biella teaches (Page 44, section 2.3; page 46, Table 2, entry 1) a process for the oxidation of ethylene glycol and other diols to the corresponding hydroxy monocarboxylic acids in the presence of a supported gold-based catalyst and molecular oxygen. The product of Biella however, corresponds to the sodium glycolate since the reaction is conducted under alkaline conditions in the presence of NaOH. Under basic conditions the corresponding ester would not be expected to form. One of ordinary skill in the art would not have been motivated to modify the conditions of Biella by conducting the reaction under non-basic conditions to produce the ester, nor would there have been a reasonable expectation of success for such modification, since Biella teaches (Page 45, paragraph bridging columns 1 and 2 and 1st full paragraph, column 2) that the gold catalyst is active only under basic conditions. The instantly claimed method for producing a diol derivative is therefore patentable over the teaching of Biella, the closest prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Katsuhiro Arai on June 8, 2006.

The claims have been amended as follows:

Claims 17 and 18 have been canceled.

Claim 15, line 6: The last word [whrein] has been deleted and replaced with the word -- wherein --.

The specification has been amended as follows:

Abstract, line 12: The carriage return after the first sentence has been deleted to produce a single paragraph.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure :Lee et al (Pollimo, Synthesis and Polymerization of New Sequentially ordered Aliphatic Ester Diols, 1997, 21 (6), pages 926-936, CAS Abstract). Lee discloses (Abstract, lines 1-3) the compound $\text{HOCH}_2\text{C}(\text{O})\text{OCH}_2\text{C}(\text{O})\text{-O-CH}_2\text{CH}_2\text{-O-C}(\text{O})\text{CH}_2\text{OC}(\text{O})\text{CH}_2\text{OH}$.
4. All Post-Allowance correspondence concerning this application must be mailed to the following address: BOX ISSUE FEE, COMMISSIONER FOR PATENTS, WASHINGTON, DC 20231 or fax them to The Office of Patent Publications at 703-308-5083 in order to expedite the handling of such correspondence (amendments under 37 CFR 1.132; information disclosure statements, formal drawings, etc.) Sending Post-Allowance papers to the technology center will only cause delays in matching papers with the case.

Contact Information

For information concerning:

- Status of correspondence sent after receipt of the Notice of Allowance
 - ◆ **Contact – Correspondence Branch at 703-305-8027**
- Notices of Abandonment for failure to pay the Issue Fee or Failure to submit formal drawings Contact – 703-305-5358/5340 or by fax 703-305-8755
- Issue Fees that have not been paid for at LEAST 3 months, but no issue notification has been received Contact – 703-305-8263
- Non-receipt of the Letters Patent Contact – 703-305-8263
- Status of application after the Issue Fee has been paid
- Status of Issue Fee payments or status of receipt of Issue Fees
- Status of allowed applications after receipt of drawings or fees
- Status of receipt of formal drawings after allowance
- ◆ **Contact – Customer Service at 888-786-0101 or 703-308-6789 or 703-305-8497 or 703-305-8495 or 703-308-6790 or by fax at 703-308-5065**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Zucker whose telephone number is 571-272-0650. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PAUL A. ZUCKER, PH.D.
PRIMARY EXAMINER
